

SLIMLINE TURBO

(Flame System 5)

USERS INSTRUCTIONS

THIS CAT I_{2H} APPLIANCE IS FOR USE
ON NATURAL GAS G20 AT A SUPPLY
PRESSURE OF 20 mbar IN GB & IE

HAND THESE INSTRUCTIONS TO THE USER

DESCRIPTION

The Slimline Turbo is a decorative gas fire which incorporates a horizontal flue that has been designed specifically to be used in applications that do not have a conventional chimney or flue but can be located so that the flue can terminate on an outside wall.

The fire is switched 'ON' and 'OFF' from a push button situated on the right hand top corner of the surround and is controlled by a fully modulating thermostatic thermostat. Once the desired room temperature that has been selected by the control has been reached, the gas input to the appliance is automatically reduced to low. The fire has been constructed to enable it to be installed into applications where the warmth and comfort of an open fire and high radiant heat is required. This appliance is intended for decorative purposes, the coal bed uses ceramic simulated coals to give a realistic appearance and to allow secondary air to be entrained into the bed to ensure clean combustion. An aerated single port steel burner is used running parallel across the front of the fire. A Flame Supervision Device (FSD) is fitted to ensure that should the pilot flame be extinguished for any reason, (including turning off the appliance), the gas supply to the burner is cut off until a full lighting sequence is repeated. A battery operated spark generator is used to ignite an Oxy/pilot sensor (O.D.S) which will cause the appliance to 'shut off' in the event of continued spillage occurring under hazardous or blocked flue conditions. The fire bed consists of ceramic fibre components and coals all of that are removable for cleaning purposes when required. It is important when relaying the coal bed and coals to follow the instructions correctly.

TECHNICAL DATA

TYPE OF GAS	G20 only
SETTING PRESSURE	20 mbar +/- 1 mbar (cold)
GAS INPUTS (Gross)	Max 6.6 kW (22500 Btu/h) Min 2.83 kW (9700 Btu/h) Pilot 0.26 kW (890 Btu/h)

IMPORTANT NOTES

This appliance is intended for decorative purposes, it is designed and manufactured to the relevant requirements of EN 509, BSI S.I.T. 8 and BS 5258 Pt 16 : 1991, it is for use on Natural Gas Only.

Areas of this appliance will become hot after prolonged running and it is recommended that for the protection of the very young, elderly and infirm a fireguard conforming to BS 6539 or BS 6778 be used. Combustible materials should not be put or left on the hearth nor should the coal bed be used to burn rubbish or other materials.

The type of front and fret recommended is shown as Fig 1 in this instruction, it has a perforated fret to allow air to be drawn into the coal bed for combustion and over the controls for cooling purposes. If other fronts and frets are to be used they must have a minimum open area in the fret of 50 sq. cms and 60 sq. cms in the front.

Additional purpose built ventilation is not required for this appliance in GB only, for Ireland (IE) ventilation is required with a minimal cross sectional area of 100 sq. cms and should be checked regularly to ensure that it is free from obstruction. It must be fitted in accordance with the rules in force.

Care must be taken on the selection of wall coverings within close proximity of the fire as some vinyl and embossed materials may become discoloured by convected heat. Soft furnishings must be kept clear from the radiant heat of the fire and from impinging the hearth area. The hearth must not be covered by any combustible materials such as carpets etc.

This appliance is fitted with an Oxy-pilot, which in the event of the flue being blocked or hazardous conditions exists which causes the appliance to spill products of combustion, will shut 'OFF' the gas supply. If when the fire is relit the sequence is repeated the appliance must be turned 'OFF' and not used until expert advice has been obtained.

In very strong wind conditions the fan may be heard to increase in speed, this is not detrimental to the operation of the appliance, as the increase is to extract those products that may be prevented leaving the flue by the wind. Exceptionally the fire may shut down and require relighting due to a sustained strong gust.

The curing effect of heating the coals will cause an initial odour which, although not harmful, may require additional ventilation until the odour has disappeared.

This product uses fuel effect pieces, gaskets and insulation material containing Refractory Ceramic Fibre (RCF), which are man-made vitreous silicate fibres. **Excessive** exposure to these materials may cause temporary irritation to eyes, skin and respiratory tract, consequently, it makes sense to take care when handling these articles to ensure that the release of dust is kept to a minimum.

This fire will run for 4.4 hours on one therm of gas with the gas control on the high setting.

Clearances

Side. Minimum clearance required to any combustible material to the side of the appliance must be 150mm.

Shelves. Minimum clearance to the underside of a 150mm deep combustible shelf from the hearth must be 790mm, add 12.5mm to this dimension for every 25mm increase in the depth of the shelf.

To light the appliance

Press down the control button at the right top corner of the surround. The fan should be heard to start initially on high speed and then reducing to low speed, a spark will be heard and the gas will light at the pilot positioned at the centre of the front simulated coal (if a spark is not heard - check battery). Hold for a period of 10-15 seconds and release - the main burner will light.

A taper may light the appliance by placing the lit taper over the coal front at the approximate centre position and pressing the control button. See Fig 1.

The thermostat control situated behind the ashpan cover (fret) is to be set to a position which maintains the room at the desired comfort level, i.e. the higher the control setting the higher the mean temperature of the room. Adjustments to this control will take time for the effect in the room to be apparent.

To turn off the appliance and pilot - lift the control button.

IMPORTANT: After turning OFF or if the pilot and the appliance goes out for any reason, wait for three minutes before attempting to relight.

Dismantling the Fire Bed for Cleaning

Allow the appliance to cool for 1 hour before handling any components.

Remove the loose coals, lift off the simulated coal front, and remove the coal support shelf. Once all the fibre components have been removed from the firebed check that no debris has fallen in or lodged the burner slots. If any debris is present it may be easily removed by using a small piece of thin cardboard to ease out any foreign matter. Be sure to remove the cardboard after use. Any sooty deposits or debris left on the coals may be removed by using a soft brush or by careful use of a vacuum cleaner. . Cleaning should be carried out in a well-ventilated area or in the open air, by gently brushing with the pieces held away from your face so that you avoid inhaling the dust. We do not recommend the use of a normal domestic vacuum cleaner, which may blow dust back into the air. Any sooty deposit on the thermocouple probe can be cleaned of using a non-fluffy cloth.

It is very important that the coals and the coal bed components are laid as shown no extra coals or material may be used. If any of the items become lost or damaged, replacements must be obtained before further use of the appliance.

Relaying the Coal Bed

Fit the coal support shelf and simulated coal front. Fig 2

Referring to figures 2, 3 and 4 lay the coals as follows:

1. Place 4 large round coals between the simulated coal front and the support shelf. Fig 3
2. Place 3 round coals between the gaps in the front row. Fig 3
3. Place the 5 small round coals between the gaps formed in the coals laid in 1 & 2 above. Fig 4

Cleaning the Front of the Appliance

The fire must be turned off and allowed to cool. The paintwork should be cleaned with a soft cloth or soapy water; the brass trim has a clear lacquer coating to preserve the polished finish. **DO NOT USE ABRASIVES OR METAL POLISH.**

Spares and Service

For spares and service contact your local supplier, installer or direct to the manufacturer stating that the appliance is a Slimline Turbo and quote the serial number from the data label located on the fascia panel.

If the fire fails to light and no spark is heard - in the first instance a replacement battery should be obtained and fitted. To replace battery, remove the heat shield protecting the unit and slide battery forward. Ensure -ve connection is uppermost on the replacement and slide into the connector receptacles.

Advantage should be taken of regular servicing and inspection of gas appliances to ensure their continued safe operation.

Short Parts List

Description	Crosslee Pt No
Coal Support Shelves	42836
Front Simulated Coal	42769
Fibre Back	42830
Set of Coals	42658
9 volt Battery PP3S	

REGISTRATION RECORD

Purchaser's Name

and Address

Supplier's Name

and Address

Date of Purchase Serial No

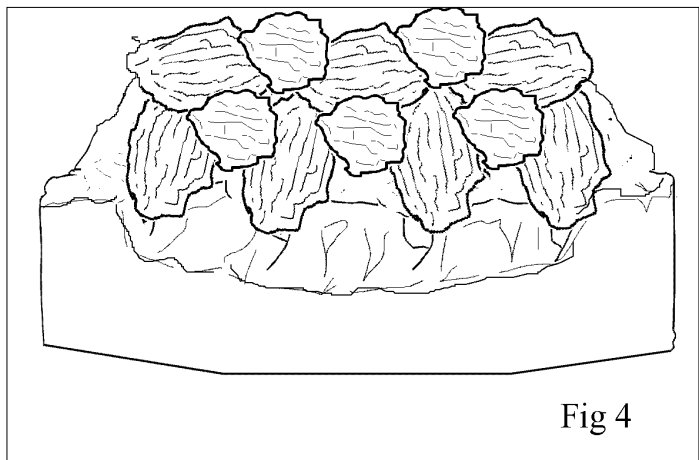
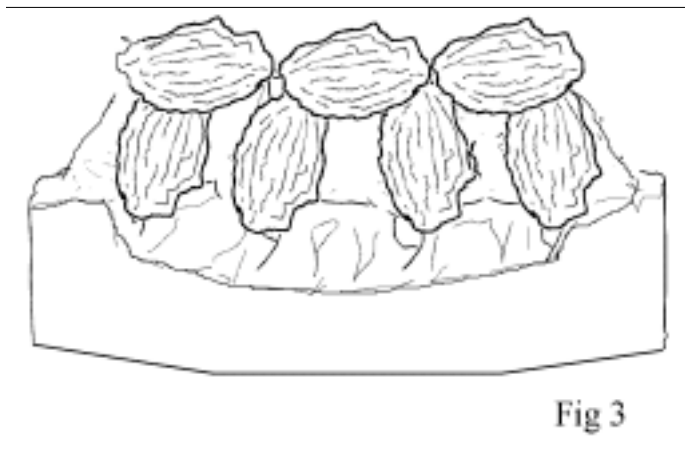
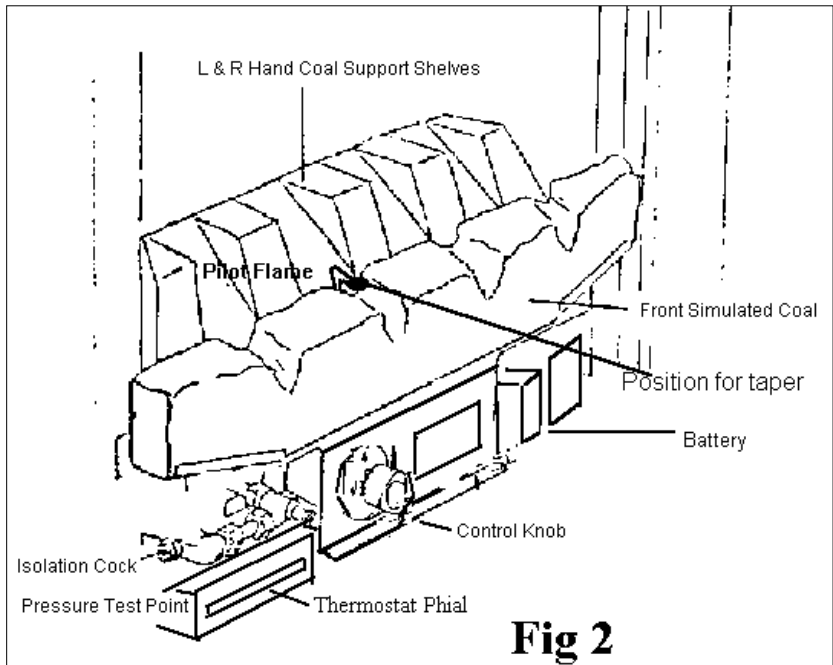
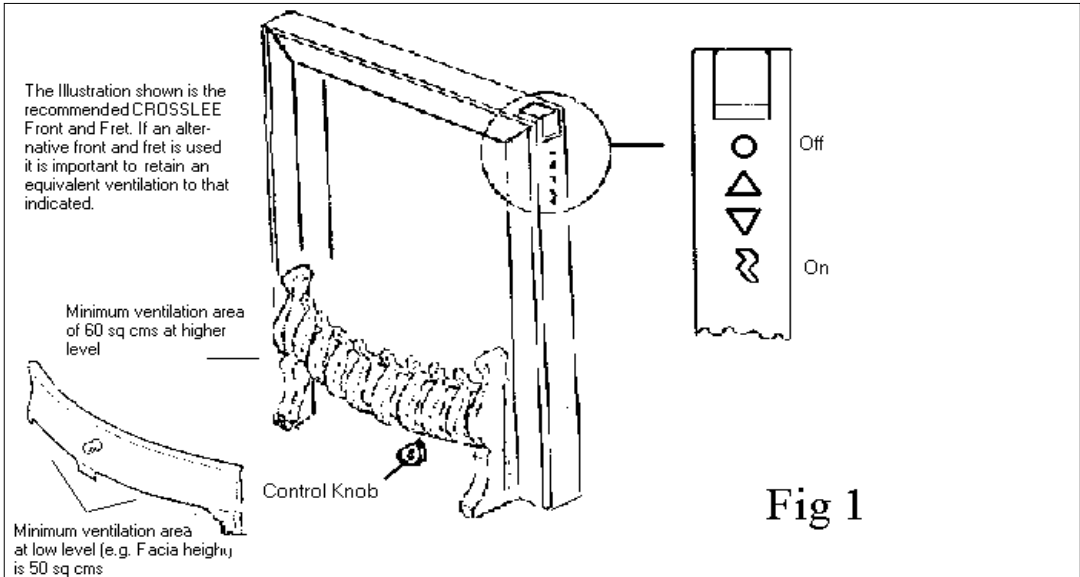
Please return these details with any components returned under guarantee.

Royal Cozyfires are manufactured by:

CROSSLEE plc
 Aber Park Industrial Estate,
 Aber Road, Flint, Flintshire. CH6 5EX
 Spares Tel 01422 203963
 Fax: 01422 204475
 Service (GSA Ltd) 01703 516611
 Customer Service 01422 200660
 Fax 01422 206304

*Technical Help Line 0906 8633268

*Calls charged at 60p per minute





SLIMLINE TURBO

INSTALLATION & SERVICING INSTRUCTIONS

THIS CAT I_{2H} APPLIANCE IS FOR USE
ON NATURAL GAS G20 AT A SUPPLY
PRESSURE OF 20 mbar IN GB & IE

HAND THESE INSTRUCTIONS TO THE USER

DESCRIPTION

The Slimline Turbo is a decorative gas fire which incorporates a horizontal flue that has been designed specifically to be used in applications that do not have a conventional chimney or flue but can be located so that the flue can terminate on an outside wall. The maximum permissible wall thickness is 600mm and the minimum 100mm. The flue is connected directly to the back of the hot box, it must be straight with no bends or elbows permitted and is connected to a fan unit housed on the exterior wall to extract the products of combustion. A standard fire surround, back panel and hearth which comply to all the relevant standards and precautions may be used with this appliance.

A Flame Supervision Device (FSD) is fitted to ensure that should the pilot flame be extinguished for any reason, (including turning off the appliance), the gas supply to the burner is cut off until a full lighting sequence is repeated. The fire is switched 'ON' and 'OFF' from a push button situated on the right hand top corner of the surround and is controlled by a fully modulating thermostatic thermostat. Once the desired room temperature that has been selected by the control has been reached, the gas input to the appliance is automatically reduced to low. The fire has been constructed to enable it to be installed into applications where the warmth and comfort of an open fire and high radiant heat is required. This appliance is intended for decorative purposes, the coal bed uses ceramic simulated coals to give a realistic appearance and to allow secondary air to be entrained into the bed to ensure clean combustion. An aerated single port steel burner is used running parallel across the front of the fire. A battery operated spark generator is used to ignite an Oxy/pilot sensor, the Oxy/pilot or (O.D.S) will cause the appliance to 'shut off' in the event of continued spillage occurring under hazardous or blocked flue conditions. The fire bed consists of ceramic fibre components and coals all of which are removable for cleaning purposes when required. It is important when relaying the coal bed and coals to follow the instructions correctly.

There are special requirements for installations in timber framed dwellings relating to minimum clearances between any part of the fire or the flue and combustible materials. These are stipulated in the Building Regulations for the shielding of flue pipes for class II appliances BS5871 Pt. 3 1991. A suitable guide for gas installations into timber framed dwellings (DM2 2nd edition) is published by British Gas and should be adhered to.

INSTALLATION REGULATIONS AND REQUIREMENTS

The appliance must be installed by a competent person in accordance with the current Gas Safety (Installation and Use) Regulations 1994 (as amended) or the rules in force and in accordance with the manufacturers instructions. Failure to do so could lead to prosecution.

The following are the relevant Codes of Practice and British Standards.

The Building Regulations issued by the Department of the Environment
The Building Standards (Scotland)(Consolidation) Regulations issued
by the Scottish Development Department.

BS 3456 Pt 101	1987	BS 5440 Pt 1	1990
BS 5871 Pt 3	1991	BS 6891	1988

TECHNICAL DATA

Overall height	=	552mm
Width	=	402mm
Depth	=	76mm
Depth with Front and Fret	=	220mm
Type of Gas - G20 Only	Supply Pressure	20 mbar +/- 1mbar (Cold)
Electrical Supply		230-240 v ~50 Hz Fused 3 amp
GAS INPUTS (Gross)		
Thermostat settings		Max 6.6 kW (22500 Btu/h) Min 2.83 kW (9700 Btu/h) Pilot 0.26 kW (890 Btu/h)
Main Injector Type		Bray Cat 82/600
Pilot		OP. Oxy/Pilot NG 9022
Gas Connection		8mm O/D Tube
WEIGHT		28.3 kg

IMPORTANT NOTES

Areas of this appliance will become hot after prolonged running and it is recommended that for the protection of the very young, elderly and infirm a fireguard conforming to BS 6539 or BS 6778 is used.

The type of front and fret recommended is shown as Fig 17 in this instruction. It has a perforated fret to allow air to be drawn into the coal bed for combustion and over the controls for cooling purposes. If other fronts and frets are to be used they must have a minimum open area in the fret of 50 sq cms and 60 sq cms in the front.

A hearth must always be provided to project forward of the opening a minimum of 350mm depth and 150mm either side of the fire opening and must be of a minimum thickness of 12mm dependant on the floor construction with a perimeter height of 50mm. This is to ensure combustible materials, carpets etc, are not in close proximity to the radiant surfaces..

The area under the fire box must have a minimum non-combustible thickness dependant on the floor construction.

This appliance must be fitted to a non-combustible surface i.e. a plaster wall or plasterboard. Any wallpaper must be locally removed from the surface behind the firebox.

Additional purpose built ventilation is not required for this appliance in GB only. For Ireland (IE) ventilation is required with a minimal cross sectional area of 100 sq cms and should be checked regularly to ensure that it is free from obstruction. It must be fitted in accordance with the rules in force.

LOCATION OF THE APPLIANCE

The location of the appliance will be determined by the requirements for a suitable position for the flue outlet terminal. A guide to the constraints regarding the position of the flue terminal is printed below and is an extract from BS 5440 Pt 1 1990.

1. The terminal must be positioned such that the combustion products can disperse freely at all times.
2. In certain weather conditions a terminal may steam and a siting for the flue where this could cause a nuisance should be avoided.
3. If the terminal discharges onto a passageway or pathway or over adjoining property - check that the terminal will not obstruct the passageway. In some areas local bye-laws ask for a minimum height for projections from a wall above a public footpath. Check any local bye-laws.
4. If the terminal is fitted within 850mm of a plastic gutter or within 450mm of painted eaves or a painted gutter, an aluminium shield of at least 750mm long should be fitted to the underside of the gutter or painted surface. (Dimensions B & C in Fig 1)
5. If a terminal is fitted less than 2m above a balcony, above ground or above a flat roof to which people have access then a suitable terminal guard must be provided. (Dimension G in Fig 1)
6. A terminal sited in a car port or other single story add-on extension should be treated with care and the additional notes apply. Whilst other building features may satisfy the dimensional requirements, they are not included e.g. covered passages between dwellings.

ADDITIONAL NOTES FOR CAR PORTS AND OTHER SINGLE STORY 'ADD-ON' EXTENSIONS

1. Any car port or other add-on extension should consist of a roof and one wall. If it consists of a roof and two other walls - the installation shall be treated as suspect and further advice sought.
2. If there is any opening in the car port into the dwelling e.g. door, window etc. then the terminal must be at least 1200mm away from that opening. If it is more than 1200mm then D,F,H and I shall also apply where D is the vertical distance between the lowest point of the roof and the top of the terminal.
3. If the roof is plastic then the installation should be treated with great care as there is no simple way of protecting the roof.

CLEARANCE TO SHELVES

Minimum clearance required to the underside of a 150mm deep combustible shelf from the hearth must be 790mm. Add 12.5mm to this clearance for every 25mm increase in depth of shelf. See Fig 2.

CLEARANCE TO SIDE (timber surrounds etc.)

Minimum clearance required to any combustible material to the side of the appliance must be 150mm. See Fig 2.

LIST OF COMPONENTS

Fire Box Assembly c/w Burner Assembly	Fan Box Assembly
Brass Trim (held in place by magnets)	Installation & Servicing Instructions
Flue Duct	Users Instructions
Aluminium Conduit	

Coal Pack Contains:

Coal pack A - 5 Medium	Simulated Coal Front
Coal Pack B - 8 Small	Coal Support Shelf
Coal Pack C - 2 Triangular	
Coal Pack D - 2 Med/Small	

Fitting Kit: - Screws & Wall Plugs, Isolation Elbow, Bundy.

INSTALLING THE APPLIANCE

To install the appliance it is necessary to have a gas supply and an electrical supply close to the proposed siting, ideally any new feed should be to the left of the appliance. (See Fig 3.) When it is necessary to route an electrical supply across the back of the appliance it must be channelled into the wall at hearth height or lower. The appliance is designed to be installed against a non-combustible wall using a surround with a 76mm rebate. A timber frame fixing kit is available for the flue in timber framed buildings. The fire must always be fitted with a hearth and the minimum sizes are as shown in Fig 2 and listed in the following paragraph. The minimum fire resistance specification for the hearth and back panel is Class O (100°C).

The minimum thickness of insulation beneath the appliance for combustible floors is 18mm, therefore if:-

1. The floor is a solid non-combustible floor - a minimum hearth thickness of 12 mm with a perimeter of 50mm is required.
2. The floor is a timber or suspended floor - a minimum thickness of 18mm with a perimeter of 50mm is required.

When the required height for the hearth has been established and the hearth under the fire is laid in position, place the appliance in the proposed site (taking care not to damage the wiring harness protruding from the rear of the appliance), mark around the edges of the appliance and the positions of the fixing holes. See Fig 3. . (Access to the fixing holes is achieved by removal of the canopy, the fibre back and the fibre support plate. The canopy is held in position by two screws located as shown in Fig 18, the fibre back is held by the canopy). Remove the appliance and find the centre of the outline drawn. Measure up from the proposed hearth height 476mm which is the centre line for drilling a 127mm diameter hole with a core drill. Alternatively use 100mm and 25mm diameter holes as shown in fig 4 - drill through the wall.

If a combustible skirting board is fitted it will have to be cut away to give 75mm minimum clearance either side of the hot box or to the width of the hearth or surround as applicable.

To assemble the flue to the rear of the hot box use the 6 x No 8 self tap screws and the ceramic gasket supplied, pass the flue through the flue mounting plate, feed the wiring loom through the ceramic fibre gasket and the flue mounting plate, rotate the flue tube so that the flat section of the flange lays horizontal and screw into position as shown in fig 5. At this stage it is advisable to attach a piece of wire to the end of the wiring loom to pull through the wall and to keep the loom taut while feeding through the conduit. A further rock wool gasket is provided to furnish a seal around the drilled flue opening to prevent draughts. **Note.** It is advisable to seal around the flue pipe outlet on the external wall to reduce draught.

A minimal total depth of the installation is required from the surround back panel - see fig 6. For surrounds having a greater depth than 76mm, insulating material such as rock wool should be used between the hot box and the wall and spacers fabricated to fix the appliance.

Note: The appliance is not fixed in position at this stage.

TIMBER FRAME DWELLING INSTALLATION

Where a flue is to be installed in a timber frame dwelling care must be taken to protect combustible material from contact with the hot surfaces of the hot box and flue and it should be fitted in accordance with the guide lines stipulated in DM2 2nd edition document printed by British Gas.

The requirements relating to the location of the appliance and surround are the same as listed previously although special consideration should be given to the position of any vertical studwork. When a suitable location is found between vertical supports that allows the flue heat shield to be fitted and also satisfy the flue terminal and surround requirements, position the fire on the hearth and mark the outline of the hot box. Remove the hot box and measure up 476mm, find the centreline, measure and mark a rectangle for the heatshield as shown in fig 7. **NOTE THAT THE FIXING SCREWS SECURING THE FIRE IN PLACE MUST NOT BE SCREWED INTO THE STUDWORK OR TIMBER STRUCTURE IN ORDER TO PREVENT TRANSFER OF HEAT THROUGH THE FIXINGS.** When plasterboard is used, the weight of the appliance must be supported on the hearth. Carefully remove the rectangular section avoiding damage to the vapour barrier behind the plasterboard. Cut the vapour barrier diagonally and fold back for access to the insulation quilt, cut the quilt and inner timber sheathing to the same size as the rectangle. Mark and drill the outer wall as shown in fig 4.

When fitting appliances with circular flues into existing timber framed houses, a drip collar should be used. One can be constructed by wrapping a wire (of material that will not promote corrosion) tightly around the assembly, twisting the ends together underneath the duct. See fig 7.

The heatshield supplied in the timber frame kit is manufactured in two pieces, an inner and outer skin with approximately 25 mm air gap between. Measure the total thickness of the inner wall, the heatshield must be trimmed down to the depth of the inner wall and should not project more than 10 mm into the cavity. Remove the two screws securing the two skins together to enable the two halves to be trimmed with a pair of tinsnips or hacksaw and replace the two halves together.

Screw the heatshield to the wall as shown in fig 7 using cavity fixing plugs if necessary, use non combustible material as fig 8 as required and locate the closure plate (see fig 6A).

GAS SUPPLY

BEFORE COMMENCING WORK, TURN OFF ANY APPLIANCES THAT ARE FED BY THE METER AND ISOLATE THE GAS SUPPLY BY TURNING OFF AT THE METER

The gas connection to this appliance is made with 8mm o/d rigid or semi rigid tube to a pressure test elbow situated on the L/H side of the burner as shown in Fig 3. It is advisable to provide a means of isolating the gas supply to the appliance for servicing using the isolation cock supplied. Provision is made for entry into the box in both L&R hand sides although for ease of installation, it is recommended that the gas feed is made from the left hand side. Any pipe used under the tray must be in rigid tube such as bundy. Suitable pieces of bundy are included in the fitting kit to assist the installer.

Where a concealed gas supply is used, the installer is reminded of the requirements of BS 6891 - 1988 dealing with enclosed pipes. The Standard requires that when a gas pipe is fed through a wall, the pipe should be enclosed in a tight sleeve to protect against failure caused by movement and shall be constructed to prevent passage of gas either between the pipe and sleeve or sleeve and wall.

NOTE: The gas supply to the appliance must not be left 'ON' until such time the installation is complete and tested.

ELECTRICAL SUPPLY

Wiring external to the appliance must be in accordance with the IEE wiring regulations and any local additions to those regulations.

The appliance is supplied for 230-240 V ~ 50Hz single-phase operation, fuse rating 3 amp. As certain installations would require a concealed electrical connection; a fused double pole isolator having a contact separation of at least 3mm in all poles serving only the appliance must be used. For installations which use an existing 13 amp switched socket, the wiring of a suitable approved plug is shown in fig 21. The socket must be accessible after the installation of the appliance.

It is essential that the electrical supply in the property should be properly earthed in accordance with current IEE regulations.

ASSEMBLY OF THE FAN BOX TO THE EXTERIOR WALL

With the flue attached to the rear of the fire and located in the correct position, the flue and wiring harness will be protruding from the wall. In most installations the flue tube will need to be trimmed to the correct length.

To establish the maximum length required, the fan box mounting plate will have to be removed from the fan box assembly by unscrewing the six fixing screws around the fan box cover and the three self tap screws holding the deflector plate in position. This will give access to the four fixing screws on the fan box mounting plate - see figs 9 & 10.

Feed the wiring harness through the 21mm hole in the fan box mounting plate and slide over the flue tube. Hold in position against the wall and place a straight edge across the outer flanges. Scribe a line to mark the maximum protrusion of the duct. See fig 10. Remove the plate. To prevent distortion of the flue tube it is recommended that the appliance is withdrawn from the hole and the flue duct is trimmed down to the correct length with tin snips or hacksaw. Refit the appliance and fix in position using the screws provided. Replace the plate, spot drill through the four fixing holes and using plugs and screws provided, fix into position.

IMPORTANT. THE FAN MOUNTING BOX MUST BE HORIZONTAL TO ENSURE CORRECT OPERATION OF THE FLOW SENSE SWITCH.

As previously advised, the length of wire fastened to the loom is fed through the conduit supplied (the flanged end is located nearest the fan). Keeping the loom taut slide the conduit through the mounting plate - locate over the extruded hole at the rear of the hot box and measure the distance to be trimmed i.e. between the mounting plate and the flanged conduit. Remove the conduit and cut to length removing any burrs from the inside, refit and revolve so that the flange is located between the plate and the tag. See fig 10.

Assemble the fan support plate to the mounting plate by feeding the wiring loom through the extruded hole in the rear of the support plate and slide the flue spigot over the flue tube holding the loom taut. Secure to the mounting plate with the four fixing screws provided, secure the loom to the base with a cable tie and connect the six wires to the terminal block and the earth lead to the earthing post as shown in fig 11 (Colour to colour). Excess loom should be laid in the cable store (fig 11) avoiding contact with the fan housing. Cable ties are supplied should they be required. Replace the rear deflector (this directs cool air onto the fan bearings), replace cover in position.

If a terminal guard is to be fitted (available from your supplier), this should be positioned so there is a minimum clearance of 50mm from any part of the fan housing and screwed to the wall using suitable plastic plugs and screws.

GAS CONNECTION

Complete the gas connection to the inlet elbow/pressure test point. When the burner has been removed for any reason, ensure care is taken to fit the push button assembly correctly and ensure that the electrical connections are in place and that the solenoid is connected.

The fibre support shelf, the fibre back and the canopy can now be refitted. It is suggested that the installation is completed and tested for operation prior to fitting the other fibre components. Re-fit the surround and brass trim (the brass trim is retained with magnets).

Turn on the gas supply at the meter and purge the air to the appliance. To check the gas pressure, turn off the gas supply at the isolating cock, remove the hexagon headed screw and connect a manometer to the pressure test point. Fit the battery - make the electrical connection as described earlier and switch on the supply to the appliance. Turn on the gas and ignite the fire, allow to heat up and check that the gas pressure is 20mbar +/- 1 mbar - any appreciable drop may indicate restrictions through the pipework up to the fire. If other gas appliances are fed from the same supply, check that the input pressure remains constant with those other appliances operating. The pressure test point may also be used to check for leakage of the joints to the appliance. On completion of the pressure test, replace the pressure test point screw and check for leakage.

Note: The complete installation should be tested for Gas soundness.

Any fire surround and back panel fitted as part of the installation should be installed in accordance with the manufacturers instructions.

CHECKING OPERATION OF FIRE

Depress the control button situated on the top right corner of the surround. **Check by listening to the fan speed that it starts on high and reduces to slow** and that the electrode is sparking between the tip of the thermocouple and the electrode. Continue until a pilot ignition is established - hold for a further 10-15 seconds - release and the main burner will light. Rotate the thermoselector knob and view the flame varies between low and high. Lift the control button to the OFF position and ensure that both the pilot and main burner extinguish and the fan stops. To check the operation of the flow sense switch refer to paragraph ix in the servicing section.

LAYING THE COAL BED

Fit the coal support shelf and simulated coal front. Fig 12.

Referring to figures 12, 13, 14 and 15 lay the coals as follows:-

1. Place 3 medium round between the simulated coal front and the support shelf with 1 triangular coal placed on either side of this row. Fig 13.
2. Place 2 medium round between the centre gaps of the coal support shelf with 1 medium/small coal placed at each side. Fig 14.
3. Place the 8 small between the gaps formed in the previous coal layout. Fig 15.

SPILLAGE CHECK

Light the appliance and set to the maximum thermostat position, locate the front and fret in position and leave to warm up for 5 minutes. Check for satisfactory clearance of combustion products by positioning a lighted smoke match 20mm down from edge of canopy, 80mm from either side and 45mm back from the front edge. All the smoke must be drawn into the flue - see Fig 16. If spillage occurs, allow a further 10 minutes. The test should be carried out with all the doors and windows closed. If an extractor fan is situated in the room, the test should be repeated with the fan running. If there is a connected room with an extractor fan, the test should be repeated with all the doors in that room opened and the extractor fan running. If an open flued appliance is situated in an adjoining room, the operation of that appliance should be checked with this appliance operating. If either the appliance spills or causes another appliance to spill check the operation of the flow sense switch.

Demonstrate the lighting and extinguishing procedures to the user.

ADVISE THAT:

The curing effect of heating the coals will cause an initial odour which, although not harmful, may require additional ventilation until the odour has disappeared.

Any debris or soot is cleaned from the appliance. A vacuum cleaner can be used carefully. The appliance must be serviced annually by a competent person in accordance with these instructions; at this time the appliance should be re-checked for spillage in accordance with the method detailed in these instructions.

The thermostator is positioned so that the room temperature stabilises at the customer's comfort level and is not used as a variable heat control.

The appliance is fitted with an Oxy-pilot to prevent the continued operation in the event of spillage occurring. If the fire shuts 'OFF' repeatedly the appliance must be turned off and not used until an expert is consulted.

It is advisable to run the fan periodically when the fire is not in use (summer time) to ensure that the fan and associated components are exercised and therefore are serviceable when required. This may be achieved by releasing the on button before the gas has lit and allowing only the fan to run.

In severe winds it is possible that the flow sense switch will close causing the fan speed to increase. Exceptionally it may close down the fire which will necessitate initiating a re-lighting sequence.

Complete the registration section on the enclosed warranty form. Advise that any component part of this appliance is guaranteed against defective workmanship or faulty materials for a period of twelve months from the date of purchase.

Any such part will be replaced free of charge on receipt of the purchaser's address at the cost of postage only, provided that:

- a. It is accompanied by the registration section cut out of the booklet, together with the original purchase receipt, which will be returned with the replacement part.
- b. Any installation, repairs or adjustments have been carried out by a competent person, such as the supplier's representative or a CORGI registered installer.

HAND THESE AND THE USERS INSTRUCTIONS TO THE USER

SERVICING INSTRUCTIONS

1. SERVICING Figs 18 & 19

It is recommended that the appliance is inspected and serviced as necessary regularly by a competent person e.g. Manufacturer's or Distributor's representatives or CORGI installer.

The life of the ceramic fibre components will be dependant on the way they are handled/used. Any damaged or disintegrating parts should be replaced and the specific number of coals should not be exceeded or laid in any manner other than that described in these instructions. Check that a correctly dimensioned front and fret is being used.

The fan unit should be inspected and if there are unusual deposits of soot, the fan should be dismantled and cleaned. Check that the coal layout conforms to these instructions.

If the electrical supply cord is damaged it must be replaced by the special cord available from the manufacturer or service agent. Crosslee Part Number 42428

The inside walls and ceiling in the vicinity of the appliance should be inspected for signs of staining - if any, the cause must be determined, investigated and rectified if it is found to be caused by combustion product spillage.

The outlet of the fan should be checked for obstruction - any overgrown vegetation etc which could impede the free flow of air should be brought to the attention of the householder.

GENERAL

A. REMOVAL OF DEBRIS OR SOOT DEPOSITS

Allow the appliance to cool sufficiently before removing all of the coals and firebed components for cleaning purposes. Once all the ceramics are removed from the firebed check that no debris is located in the burner slot. If any debris is present it may easily be removed by using a small piece of thin cardboard to ease out any foreign matter. Be sure to remove the cardboard after use. Any sooty deposits or debris left on the coals may be removed by using a soft brush or by careful use of a vacuum cleaner. Any sooty deposit on the thermocouple probe can be cleaned off using a non fluffy cloth.

DO NOT USE ABRASIVE MATERIALS

B. SERVICING COMPONENTS BELOW THE BURNER ASSEMBLY (Turn OFF the gas and electrical supplies to the appliance .)

Remove brass trim (held in position by magnets), surround (six self-tap screws), battery heat shield (self-tap screw) and thermostat cover (two self-tap screws) taking care not to damage the thermostat capillary tube. Remove coals, front simulated coal, canopy (two self-tap screws) and fireback. Remove the fibre support shelf and the L & R hand cover plates (two self-tap screws each). The burner assembly may now be removed by disconnecting the gas supply at the inlet elbow, separating the two plug/socket assemblies, removing the leads from the interrupter and disconnecting the spark generator. Replace in reverse order.

i) **TO CLEAN OR REPLACE THE INJECTOR:** With the burner assembly removed as described above. Remove the aeration sleeve retaining screw. Unscrew the compression nut connecting the gas supply to the elbow injector while supporting the injector to prevent distortion of the framework. Unscrew the compression nut and remove the gas supply tube from the gas control valve, hold the injector lock nut with a spanner and rotate the injector. Replace in reverse order - ensure the aeration sleeve retaining screw is replaced.

ii) **TO REPLACE THE GAS PROTECTOR (Valve/FSD):** With the burner assembly removed as described above the gas protector can be replaced by undoing and remaking the gas connections and the interrupter. Replace components in reverse order. Carry out a leak check prior to refitting the burner.

iii) **TO REPLACE THE THERMOSELECTOR CONTROL:** With the burner assembly removed as described above remove the knob, fascia panel (two self-tap screws), control securing nut, inlet and outlet gas pipes. Remove the thermostat phial and control, replace in reverse order. Carry out a leak check prior to refitting the burner.

iv) **TO REPLACE THE SPARK GENERATOR:** The burner does not require removal. Remove the battery. Remove the heat shield (self-tap screw) protecting the generator and nut holding the generator in place. note position of leads for replacement. Replace generator, replace the components in reverse order.

- v) TO REPLACE THE OXY-PILOT ASSEMBLY: The assembly is not an item that can be serviced as part of its calibration depends on the proximity of the spark electrode and thermocouple tip. However with the burner assembly removed as described above, the complete assembly can be replaced by removing the tube nut and tube from the base of the pilot, the thermocouple from the FSD and the igniter lead. Two screws secure the bracket to the framework. Replace in reverse order - the spark gap is shown in fig 14.
- vi) TO REPLACE THE FILTER ASSEMBLY: With the burner assembly removed as described above. Unscrew and remove the tube nut and tube at the base of the oxy-pilot assembly, the filter is located in the bottom of the assembly. Replace in reverse order. See fig 15.
- vii) TO REPLACE CONTROL UNIT: With the burner assembly removed as described above. Unscrew the control unit bracket. Pull out the multipin connector from the rear of the box and separate the plug/socket connection to the micro switches. Replace in reverse order.
- viii) TO REPLACE THE FLOW SENSE SWITCH: Ensure the electrical supply is switched off, remove terminal guard (four screws), fan cover (six screws) and deflector plate (three screws). Disconnect the three leads and the red and blue silicone tubes from the flow sense switch noting their positions (fig 20), remove and replace the switch.
- ix) TO CHECK THE FLOW SENSE SWITCH FUNCTIONS CORRECTLY: The flow sense switch is calibrated to operate on the differential pressure between the positive and negative pressures from the pitot tubes. It is therefore important that these are not adjusted or repositioned. To check that the switch changes from the normally closed position when a high back pressure is present e.g. severe wind conditions, carry out the following procedure. Remove the terminal guard (four screws), and fan cover (six screws). With the appliance operating normally on high heat, blank off the flue outlet with a non-combustible material, this will cause the pressure switch to operate. The fan speed will increase and after approximately 4 - 6 seconds the gas solenoid will close cutting off the supply to the fire. The increase in fan speed and delay in shutting off the gas is to reduce the incidence of gusts causing nuisance shutdown. **NOTE. With the appliance switched 'on' during this test, the operator should be aware that mains voltages are present within the fan unit.**
- x) TO REPLACE THE SOLENOID VALVE OR SOLENOID COIL: Withdraw the burner tray as detailed above. The more common failure is the coil which can be replaced by removing the screw holding the plug connection and the retaining nylock nut and washer. To replace the complete valve, undo the compression nuts and with the valve removed, remove the two fittings from the old valve body. Replace in the new body using a suitable thread sealant to ensure a gas tight joint, tighten the two compression nuts and refit the plug. Reconnect the burner and test for leaks.
- xi) TO REPLACE THE FAN UNIT: Remove the terminal guard (four screws), fan cover (six screws) and deflector plate (three screws). Provided no damage is apparent to the scroll unit, the fan motor and impellor can be replaced by disconnecting the brown, blue and yellow leads and removing the three hex headed bolts holding the assembly in the scroll unit. The leads are reconnected colour to colour in the terminal block. Replace the covers etc.
- xii) TO REPLACE THE MICRO SWITCH ASSEMBLIES: The spark generator is controlled by separate micro switches for on 'IGN' and off 'the FSD interrupter'. The fan controller is controlled by two micro switches as an assembly. Withdraw the burner tray as detailed above. The micro switches are held in place by self-tap screws, the IGN and FSD micro switches connect to the spark generator and controller micro switches by plug and socket to the control unit.

Check for gas soundness after any removal and replacement of components.

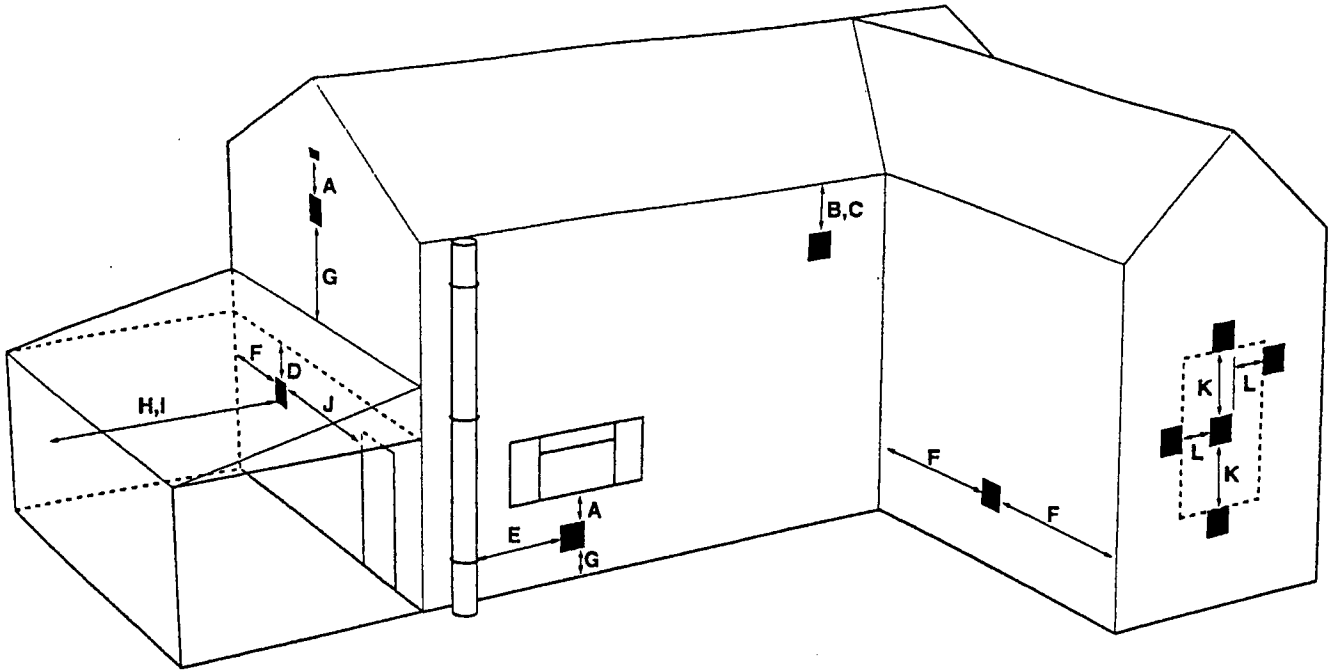


FIG. 1

TERMINAL POSITION

MINIMUM DISTANCE

- | | | |
|---|--|---------|
| A | — Directly below an openable window or other opening e.g. air brick. | 300mm. |
| B | — Below gutters, soil pipes or drain pipes. | 75mm. |
| C | — Below eaves. | 200mm. |
| D | — Below balconies or car port roof. | 200mm. |
| E | — From vertical drain pipes and soil pipes. | 75mm. |
| F | — From internal or external corners. | 300mm. |
| G | — Above ground, roof or balcony level. | 300mm. |
| H | — From a surface facing a terminal. | 600mm. |
| I | — From a terminal facing a terminal. | 1200mm. |
| J | — From an opening in the car port (e.g. door, window) into dwelling. | 1200mm. |
| K | — Vertically from a terminal on the same wall. | 1500mm. |
| L | — Horizontally from a terminal on the same wall. | 300mm. |

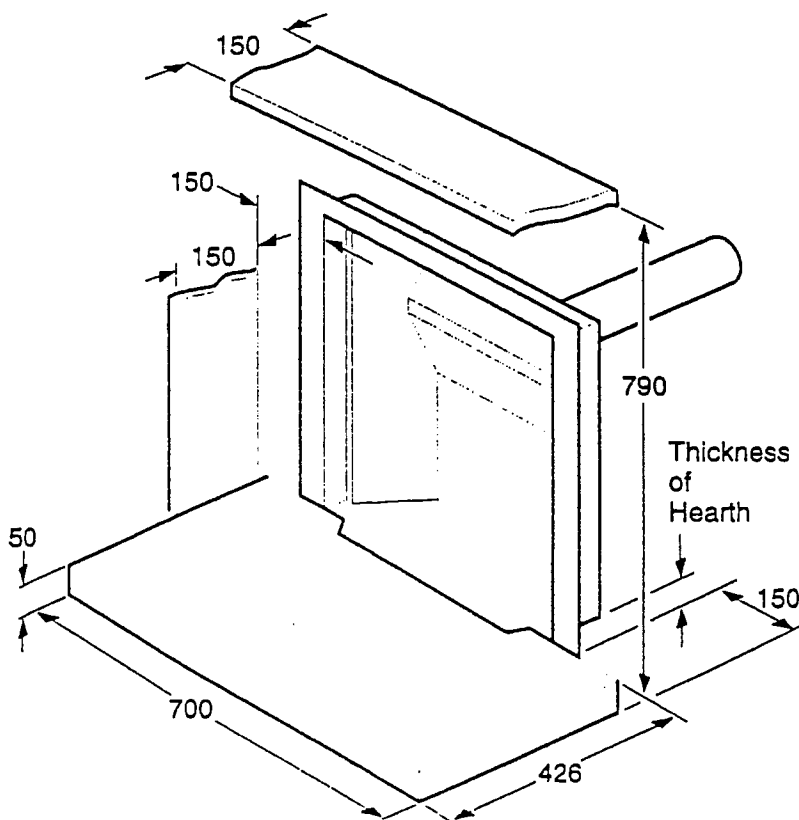


FIG. 2

The illustration shown is the recommended CROSSLEE Front & Fret. If an alternative Front & Fret is used it is important to maintain the equivalent ventilation to that shown.

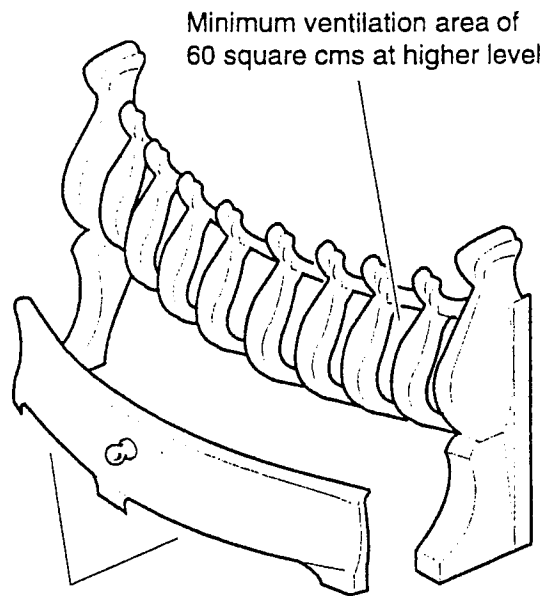


FIG. 17

Minimum ventilation area of 50 square cms at low level (e.g. Facia height)

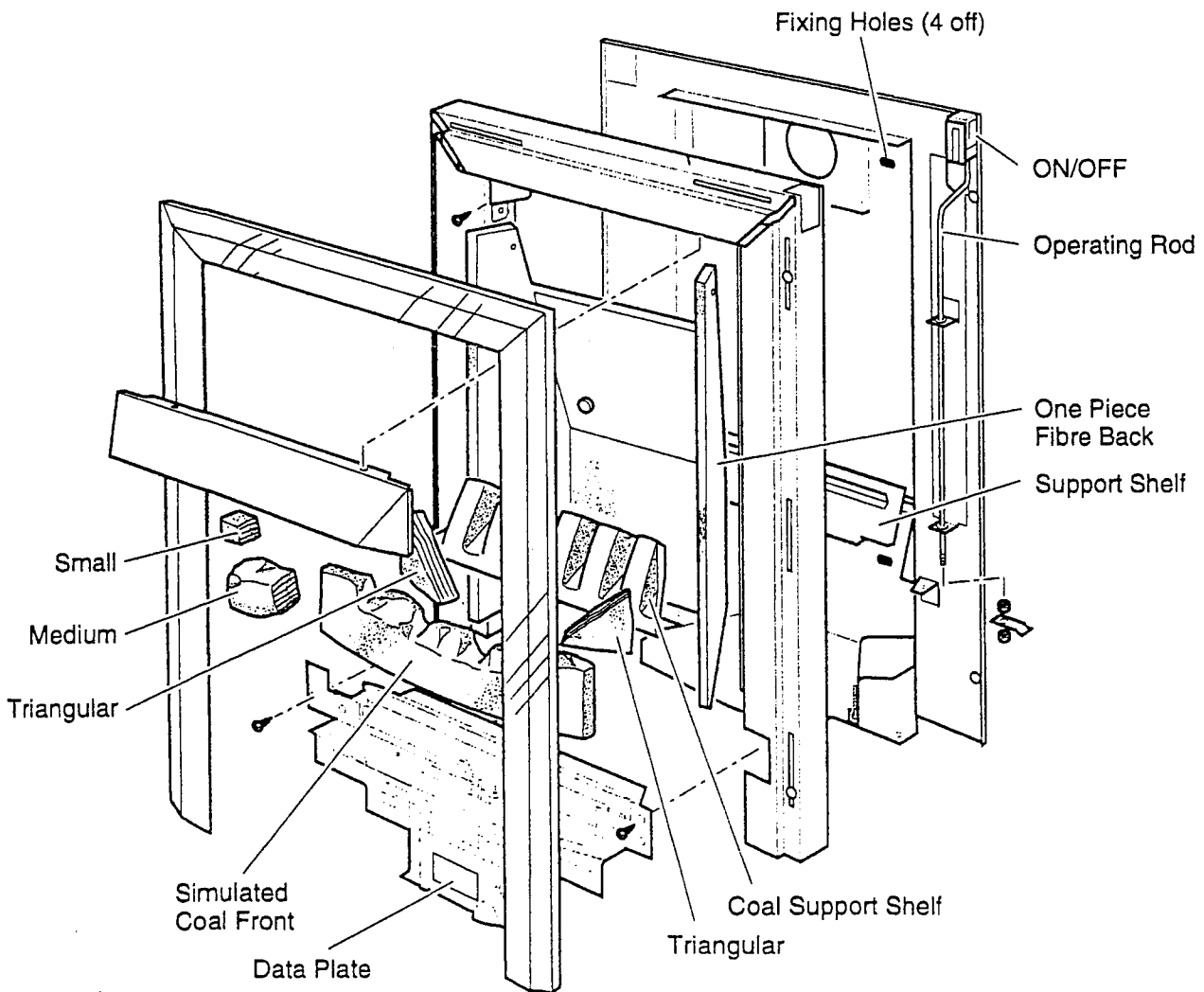


FIG. 18

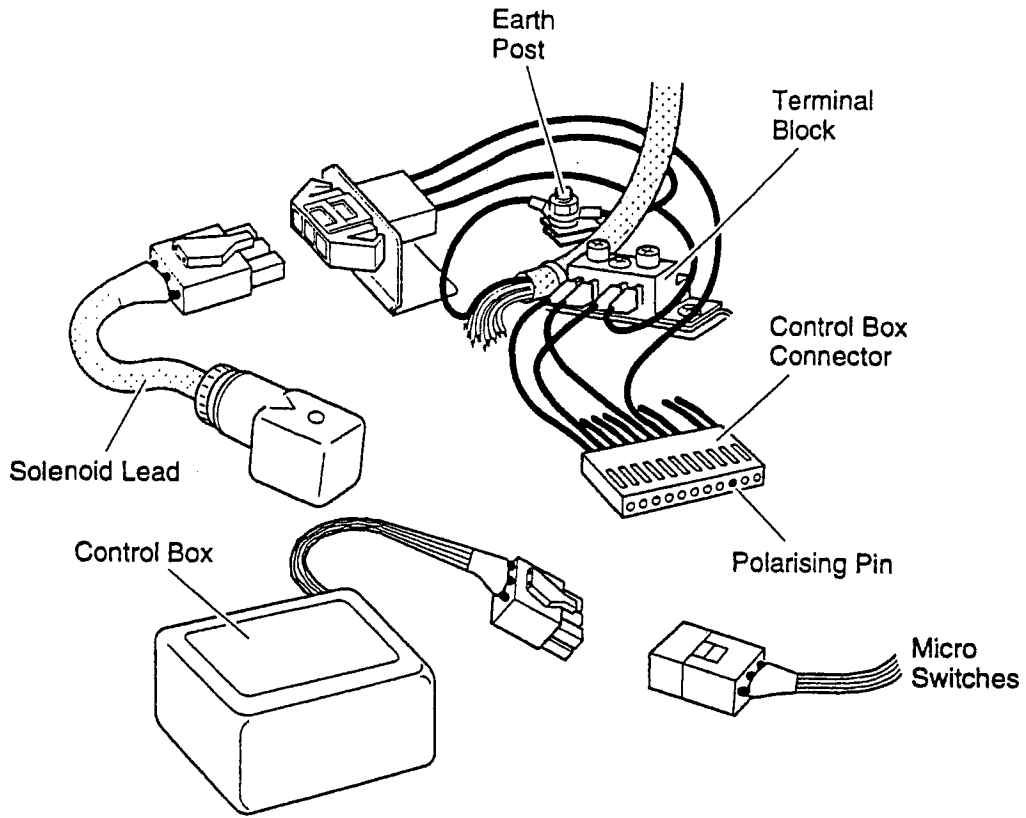


FIG. 19

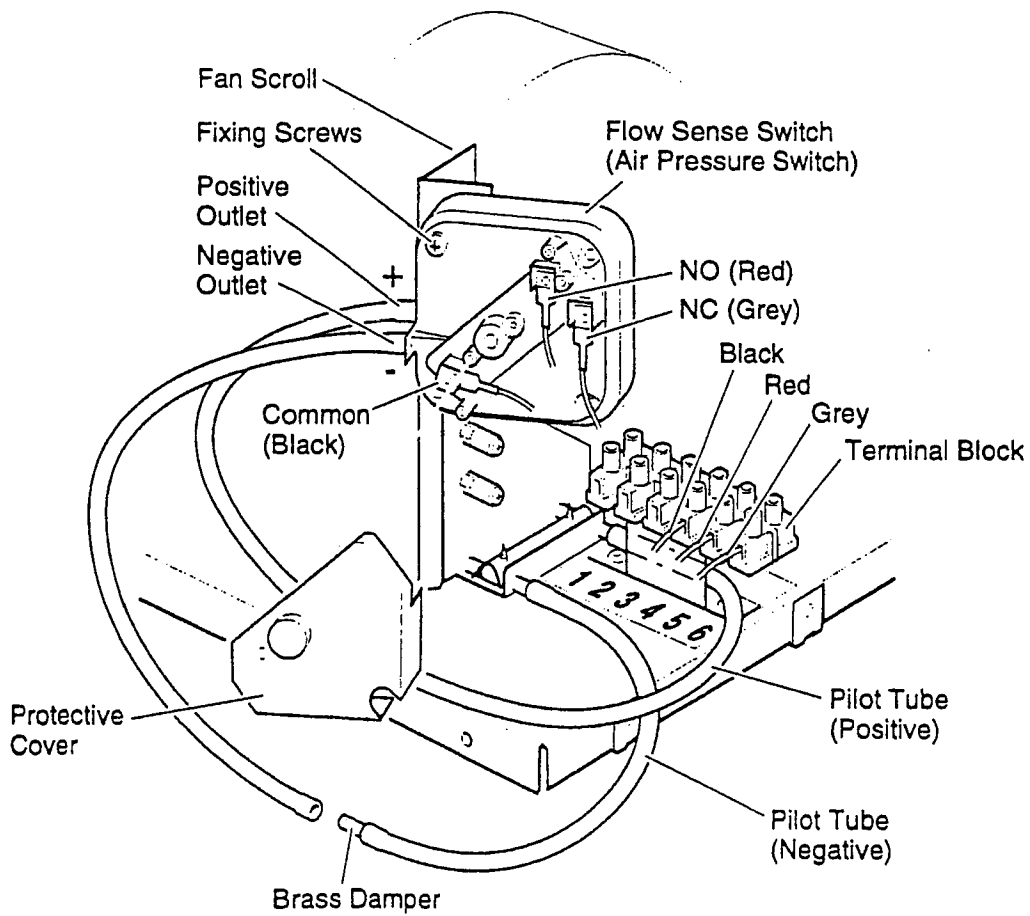


FIG. 20

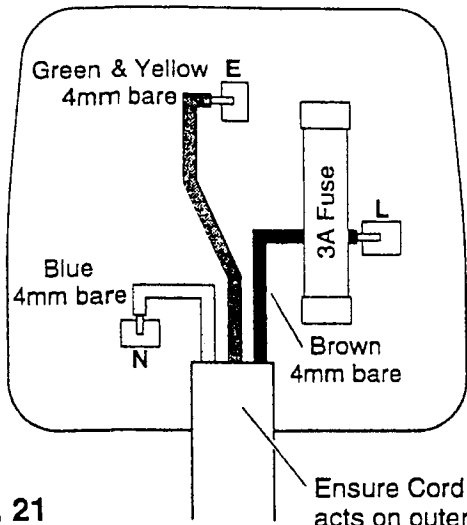


FIG. 21

GREEN and YELLOW = EARTH
 BLUE = NEUTRAL
 BROWN = LIVE

Connect the GREEN and YELLOW wire to the terminal marked E, or the earth symbol or coloured GREEN or GREEN/YELLOW.

Connect the BLUE wire to the terminal marked N or coloured BLACK.

Connect the BROWN wire to the terminal marked L or coloured RED.

The 13 amp plug should be fitted with a 3 amp fuse.

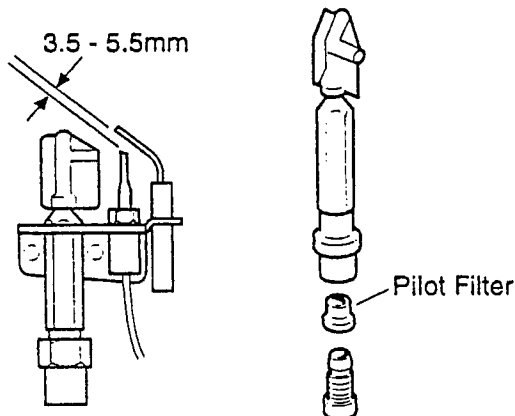
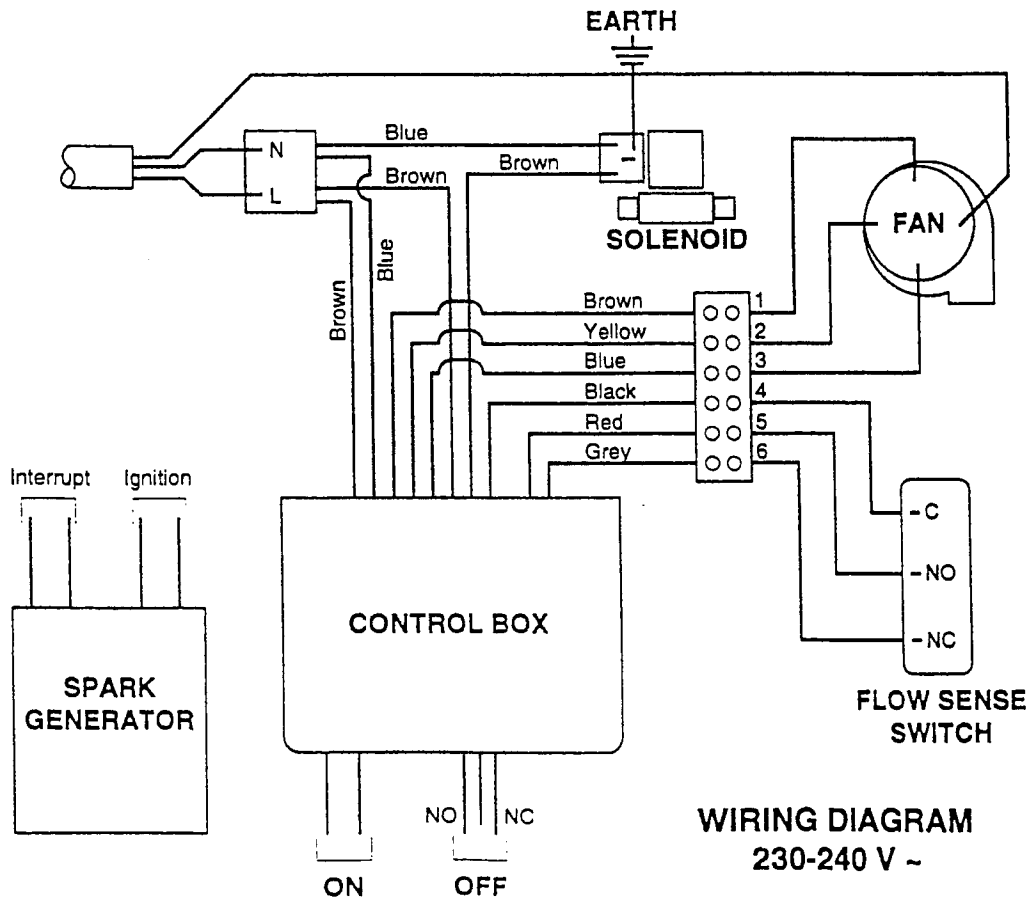


FIG. 22



WIRING DIAGRAM
 230-240 V ~

FIG. 23

REGISTRATION RECORD

Purchaser's Name

and Address

Supplier's Name

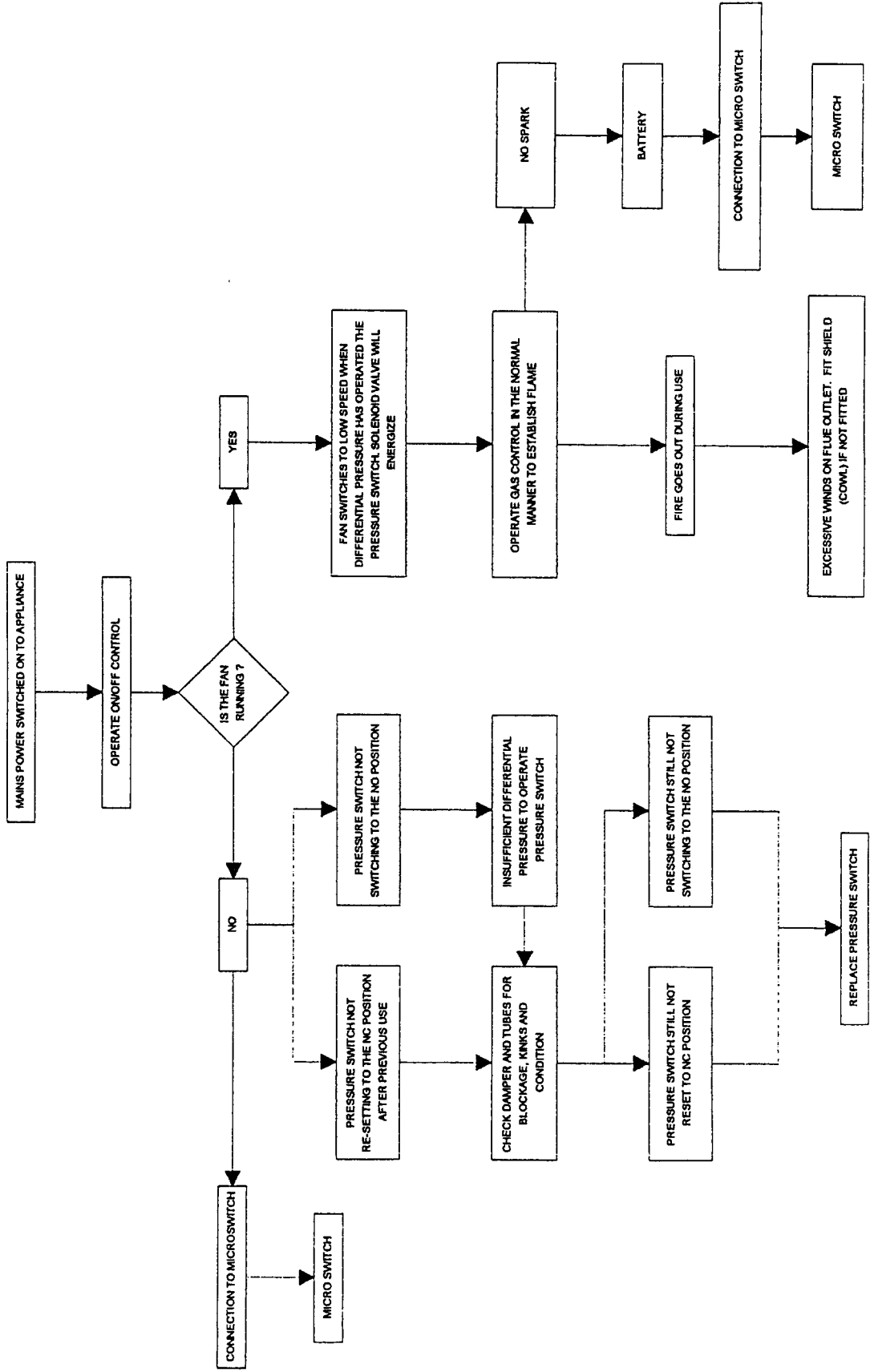
and Address

Date of Purchase Serial No

Please return these details with any components returned under guarantee.

CROSSLEE plc
Aber Park Industrial Estate,
Aber Road, Flint, Flintshire. CH6 5EX.
SPARES TEL: 01422 203963
FAX: 01422 204475
SERVICE (GSA LTD) TEL: 01703 516611

SLIMLINE TURBO : FAULT FINDING CHECKLIST



Description	Crosslee Part No.	GC.No.
Spark Generator	42545	
Gas Protector Valve	42541	
Thermoselector	42540	
Control Knob	40232	
Thermo Electric Micro Switch	42542	
Spark Ignition Micro Switch	42543	
Fan Micro Switch Assembly	42810	
Oxy-Pilot Assembly	42282	
Main Injector	41200	
Fibre Back Panel	42830	
Front Simulated Coal	42769	
Coal Supports LH & RH	42836	
Set of Coals	42658	
Control Box	42800	
Pressure Switch	42511	
Fan Two Speed	41841	
Solenoid Valve c/w/ Coil	42418	
Brass Plated Trim	42548	
Canopy	42625	
Outer Frame	42690	